

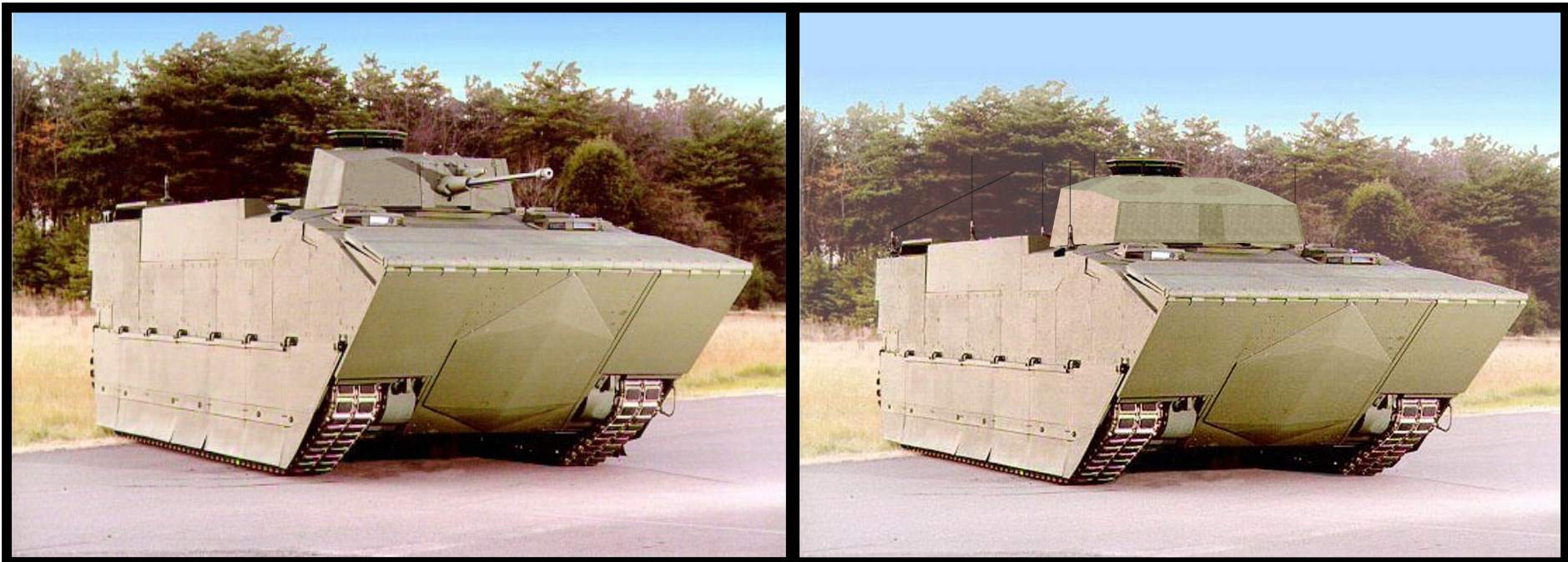


# ADVANCED AMPHIBIOUS ASSAULT VEHICLE

## C4I EMPLOYMENT



Presented by Dave  
Rowlands  
9 MAY 2002





# PURPOSE

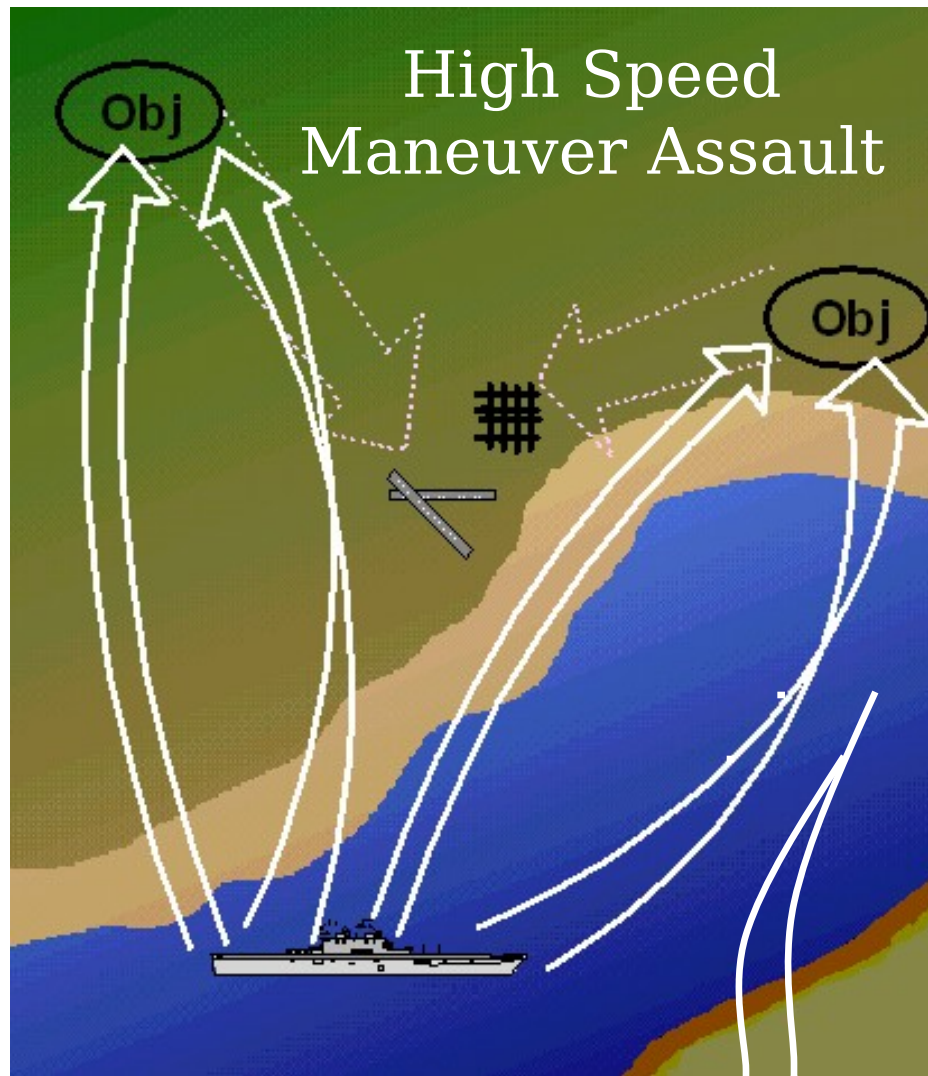
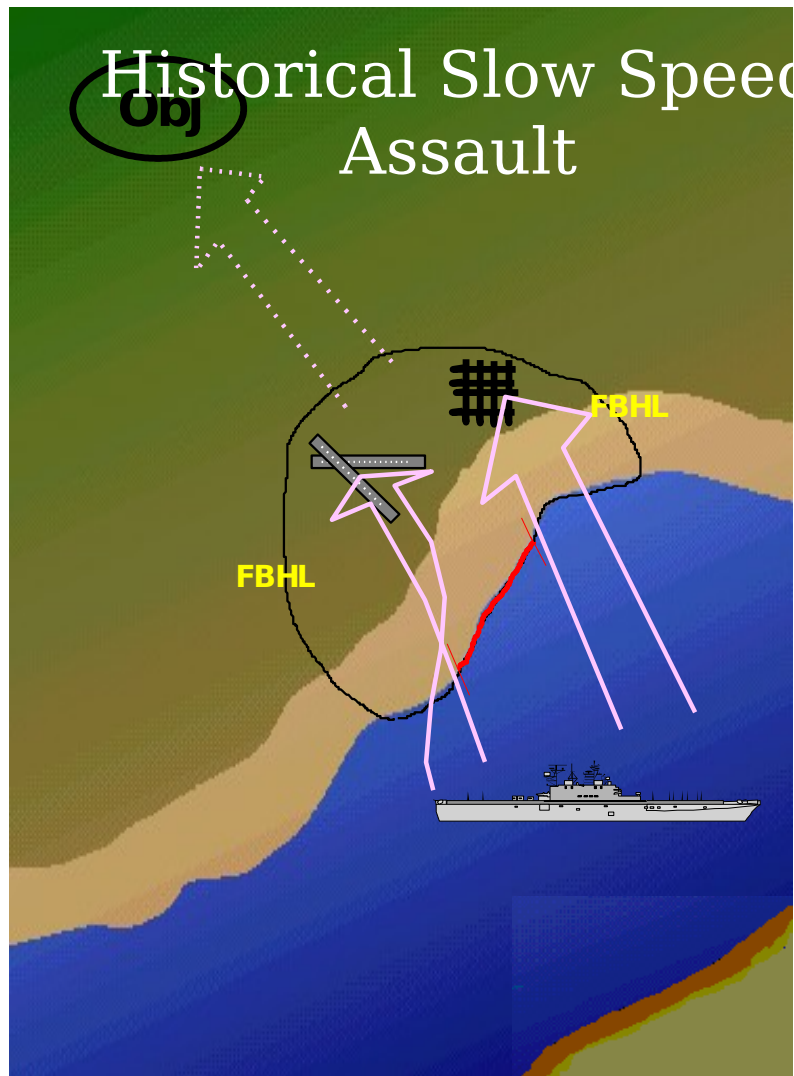


- To provide an operational overview of the AAAV mission and C4I environment to frame our interoperability discussions.



# Operational Maneuver From the Sea

## Ship to Objective Maneuver







# Operational Maneuver From the Sea Ship to Objective Maneuver



**AAAV**



**The Amphibious  
Assault  
Triad**

**V-22**



**LCAC**





# AAAV(P) Mission



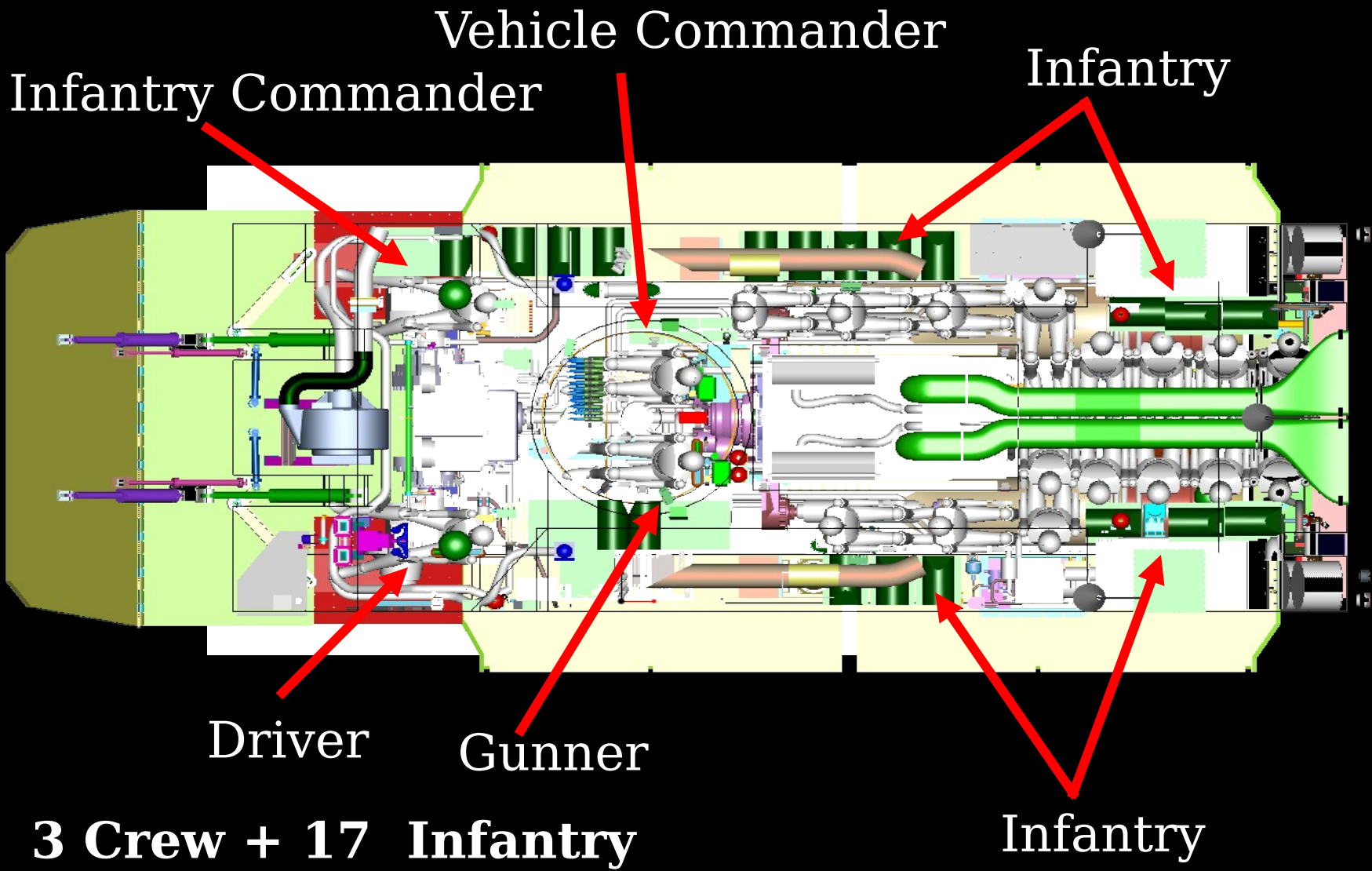
**Provide High Speed  
Transport of Embarked  
Marine Infantry From  
Ships Located Beyond  
the Horizon to Inland  
Objectives**



**Provide Armor  
Protected Land  
Mobility and Direct  
Fire Support During  
Combat Operations**



# AAAV(P) VIEW



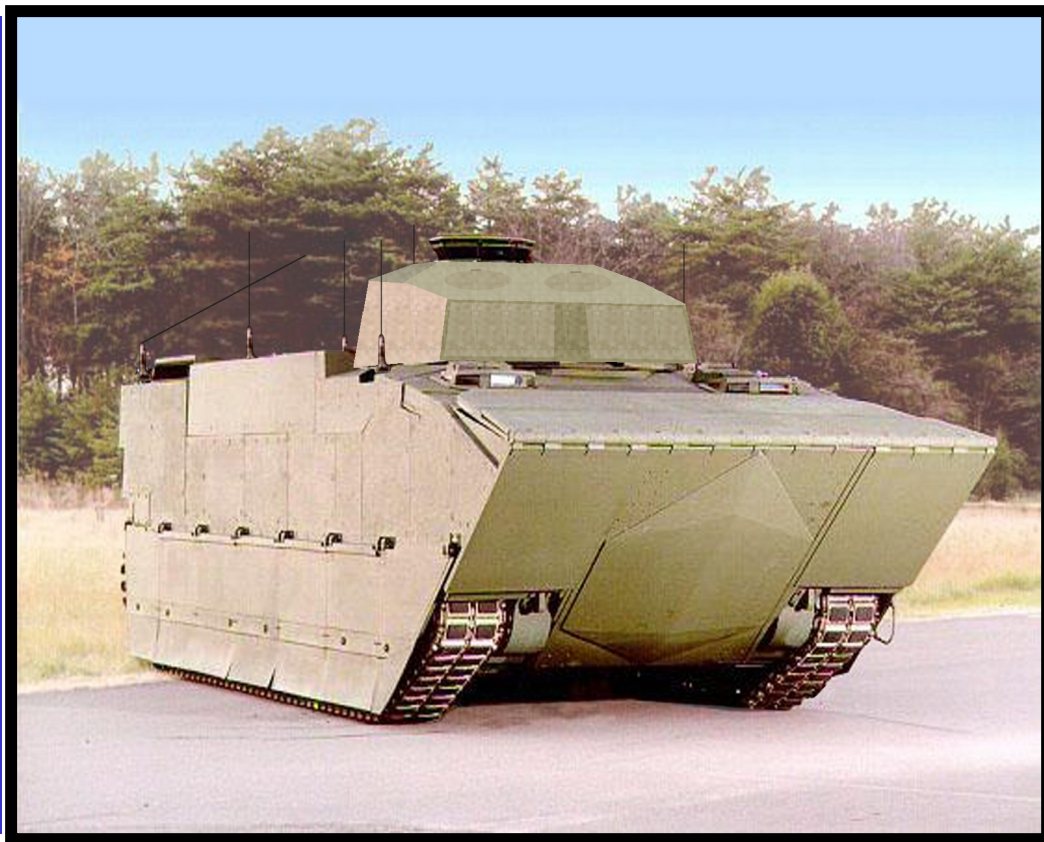




# AAAV(C) Mission



- The AAAV(C) shall enable the embarked Infantry Battalion and/or Regimental Commander and his staff members to function as an Infantry Battalion or Regimental Tactical Echelon Command Post
- The AAAV(C) shall be able to function as an Infantry Battalion or Regimental temporary Fire Support Coordination Center (FSCC).





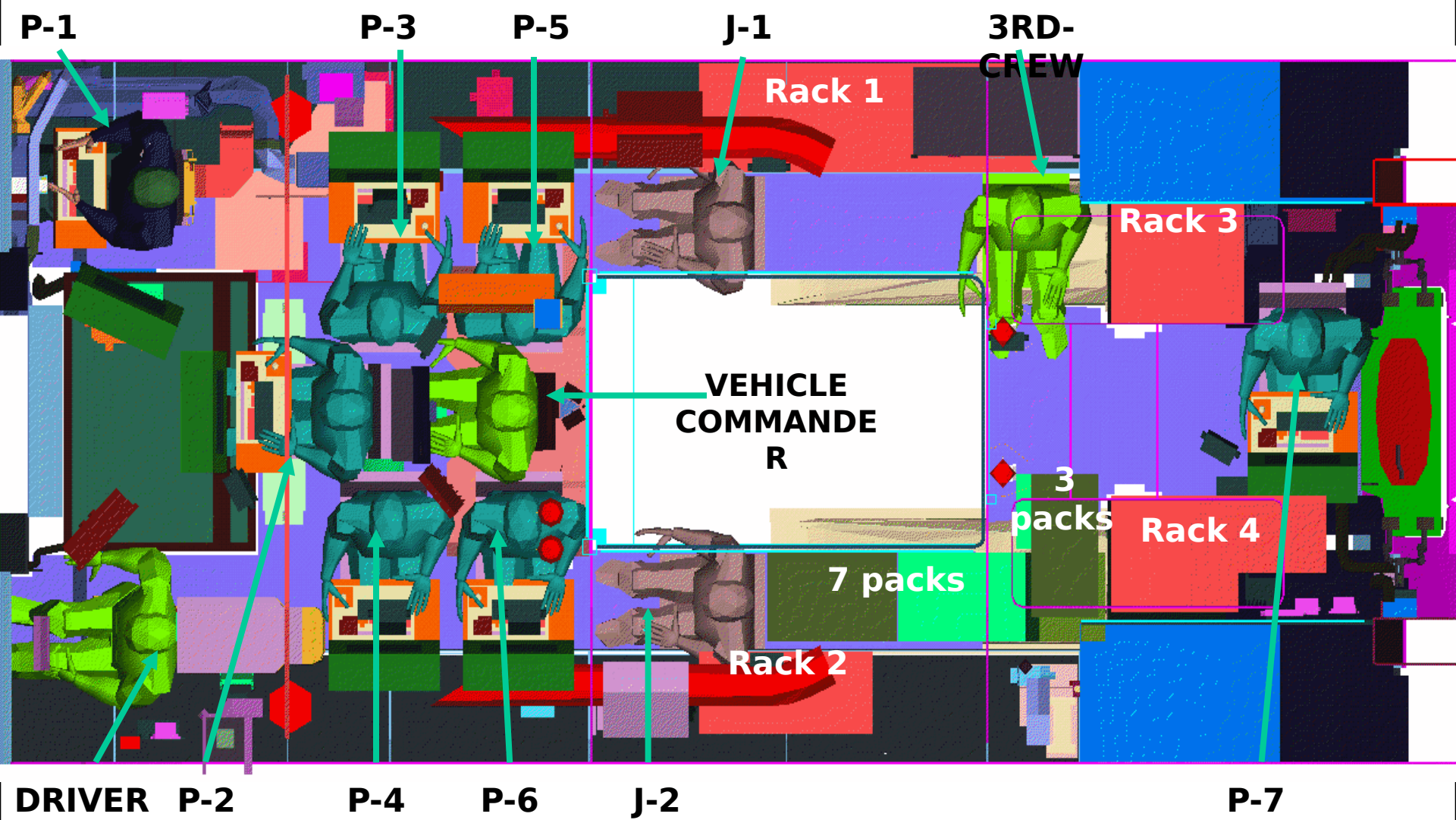
# Tactical Echelon Headquarters

- Current doctrine (FMFM 3, FMFM 6, FMFM 6-1, MCWP 3-11.2, MCWP 3-11.3) recognizes three Headquarters: Main Echelon, Rear Echelon, and Tactical Echelon Headquarters.
  1. Tactical Echelon Headquarters. Its primary purpose is to provide the Commander the freedom of movement and information to conduct close operations and maintain situational awareness.
  2. It is structured to be as small as possible (so that it can be mobile and survivable), and still provide intelligence, maneuver, and fire support functions for the Commander.
  3. It must have high mobility to permit the Commander to move rapidly to observe critical events during the battle.
  4. Tactical Echelon Headquarters usually have a lesser set of C4I capabilities than a Main Headquarters.
  5. Its main focus is the close operation, normally controlling only those forces engaged in the close battle. It deploys forward near the lead company or battalion engaged.
  6. Typically consists of the CO, S-2, S-3, FSC, AO, communications personnel.





# AAAV(C) View



Lift: 7 Staff stations (P1 - P7) , 3 Crew stations, 2 Jump



# MARINE CORPS ORGANIZATION FOR COMBAT (MAGTF)



UNIFIED COMBATANT COMMANDER



JOINT TASK FORCE HQ



MAGTF COMMAND  
/ ELEMENT (MEF)



AIR COMBAT  
ELEMENT (ACE)



GROUND COMBAT  
ELEMENT (GCE) DIV CP



COMBAT SERVICE  
SUPPORT  
ELEMENT (CSSE)



INF REGT MAIN CP



INF BN MAIN CP



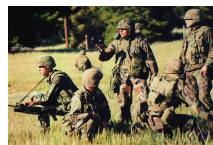
INF REG TACTICAL  
ECHELON COMMAND  
POST



INF BN TACTICAL  
ECHELON  
COMMAND POST



MOUNTED INFANTRY COMPANIES



DISMOUNTED INFANTRY COMPANIES

ISSUE: Concept for Command and Control





# AAAV (P) AMPHIBIOUS OPERATIONAL ENVIRONMENT







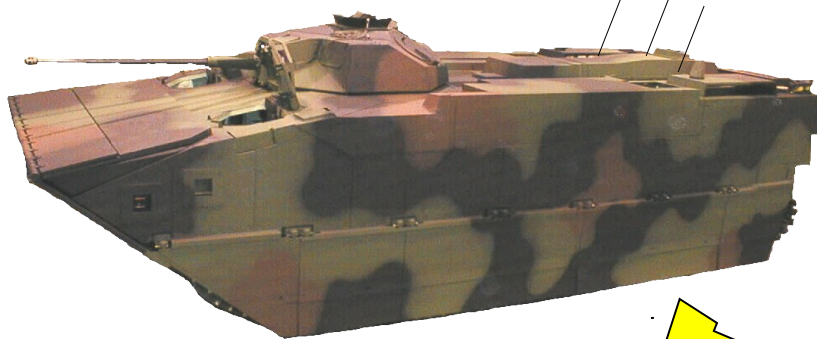
# AAAV(P) C4I Systems

## EXTERNAL COMMUNICATIONS

- 3 VHF voice/data circuits (SINGARS)
- 1 UHF data circuit EPLRS
- 1 MBMMR (SINGARS, UHF SATCOM, HAVEQUICK II)

## C2 SYSTEMS APPLICATIONS

- Command and Control Personal Computer (C2PC)



## C2 SYSTEMS EQUIPMENT

- 1 Driver Controls and Display
- 1 Vehicle Commander Controls and Display
- 1 Troop Commander Controls and Display

## INTERNAL COMMUNICATIONS

- Intercom

## NAVIGATION SYSTEMS

- GPS
- ANS
- COMPASS
- C2PC



# AAAV (C) AMPHIBIOUS OPERATIONAL ENVIRONMENT



## COMMAND ELEMENTS



COC/FSCC (BN/REG MAIN)



MAGTF HQ  
SACC/LFOC/TACLOG

## MANEUVER ELEMENTS



## FIRE SUPPORT ELEMENTS



Close Air Support/Fixed Wing



Close Air Support/Rotary Wing



Naval Surface Fire Support

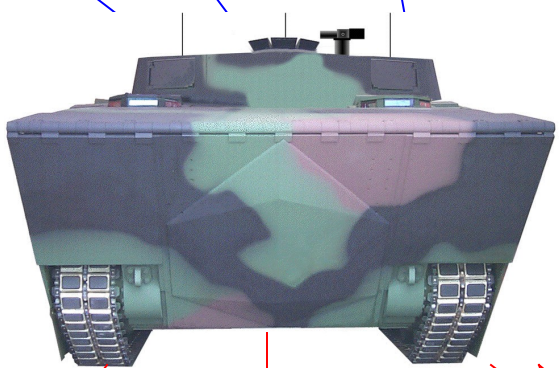


Artillery



81mm Mortar

## AAAV(C) BN/REG TACTICAL ECHELON CP



## SENSOR ELEMENTS



Special Ops ForcesLCAC



UN/NGO/Host



Coalition



Joint



# AAAV(C) C4I Systems



## EXTERNAL COMMUNICATIONS

- 6(8) VHF voice/data circuits (SINCGARS)
- 2 UHF data circuits EPLRS
- 2 MBMMR (2 SINCGARS, 2 UHF HAVEQUICK II, 2 UHF SATCOM)
- 1 HF voice/data circuit

## C2 SYSTEMS APPLICATIONS

- Tactical Combat Operations (TCO)(IOSV1)
- Intelligence Analysis System (IAS)(IOSV2)
- Command and Control, Personal Computer (C2PC)
- Advanced Field Artillery Tactical Data System (AFATDS)

## C2 SYSTEMS EQUIPMENT

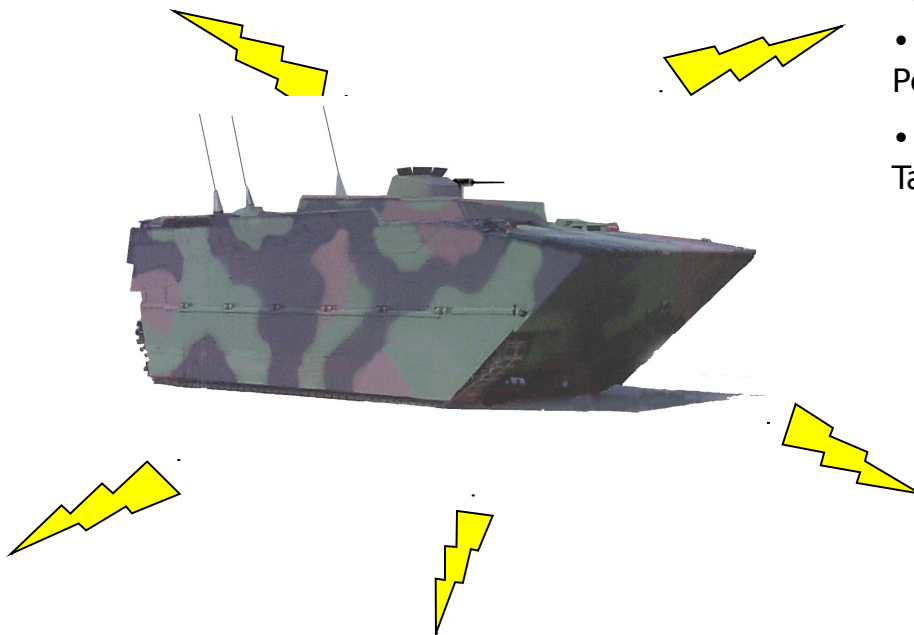
- 7 Staff Work Station Displays/Keyboards
- 1 Printer/Fax/Scanner
- 1 Tactical Data Network

## INTERNAL COMMUNICATIONS

- Intercom

## NAVIGATION SYSTEMS

- GPS
- ANS
- COMPASS
- C2PC







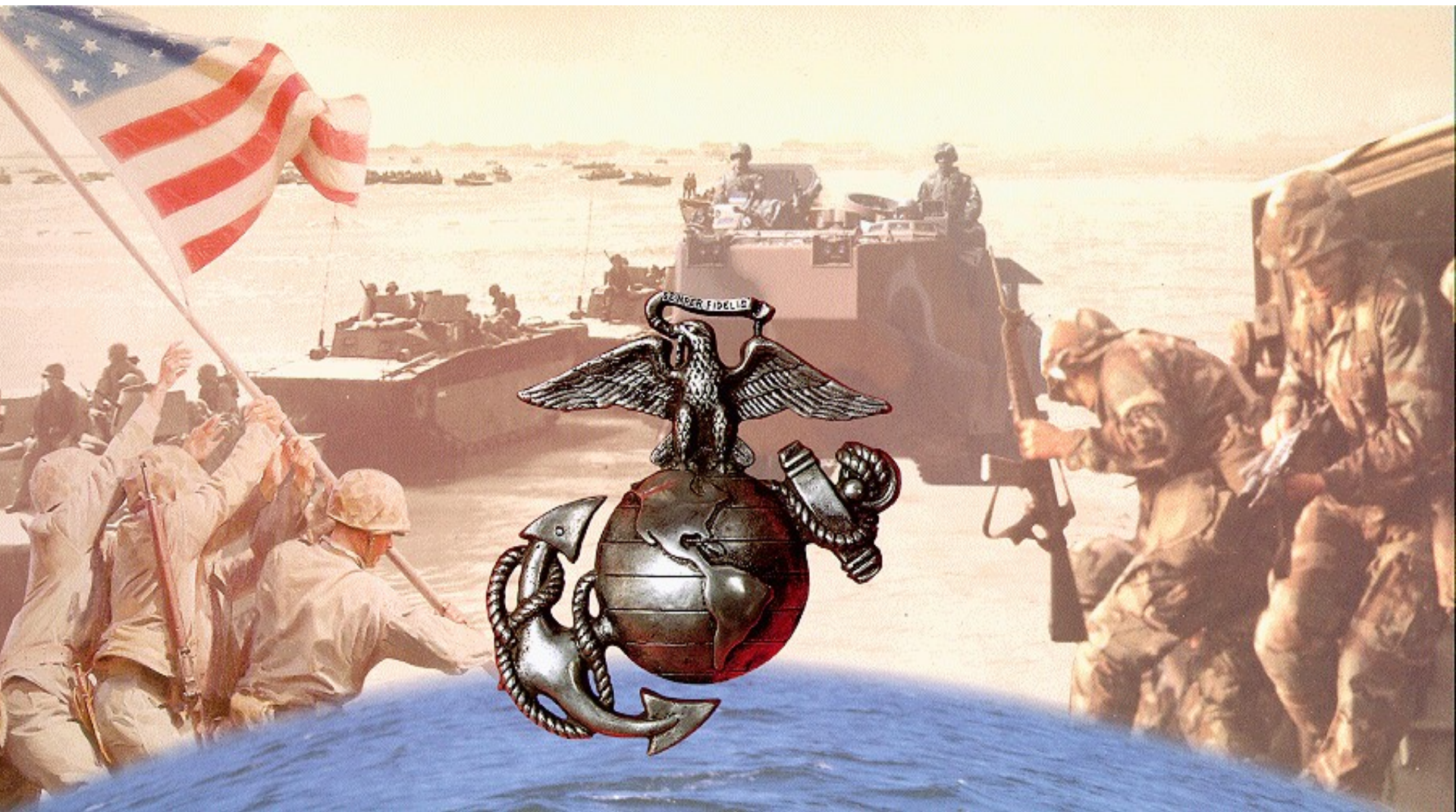
# AAAV C4I ISSUES



- Concept for Command and Control
- Command Element Campaign Plan
- Temporary Fire Support Coordination Center



# QUESTIONS



[Http://www.aaav.usmc](http://www.aaav.usmc)